Name:

at1113exam: Expand, factor, and solve quadratics (v207)

1. Expand the following expression into standard form.

$$(5x - 8)(2x - 9)$$

2. Expand the following expression into standard form.

$$(7x + 4)(7x - 4)$$

3. Expand the following expression into standard form.

$$(3x + 7)^2$$

4. Solve the equation.

$$(7x - 2)(5x + 9) \;=\; 0$$

5. Factor the expression.

$$9x^2 - 25$$

6. Solve the equation with factoring by grouping.

$$15x^2 - 18x + 10x - 12 \;=\; 0$$

7. Factor the expression.

$$x^2 - 4x - 21$$

8. Solve the equation.

$$6x^2 - 20x - 30 \;=\; 3x^2 - 4x + 5$$